

PRE-POST PUBLIC OPINION STUDY

FOR

PROJECT SWEEP

**- Survey of Community Residents by
Vollintine-Evergreen Community Association -**

Prepared for:

Project SWEEP

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Background and Objectives

Started in the Fall of 2002 and coordinated by Shelby County Schools, Project SWEEP is a comprehensive program designed to increase public awareness and knowledge about storm water pollution issues, and to provide the skills to make informed decisions and take responsible actions. One aspect of Project SWEEP involved measuring community awareness of storm water pollution issues in the area served by the Vollintine-Evergreen Community Association. As the various educational components of Project SWEEP began, surveys were completed by community residents in the Vollintine-Evergreen Community Association in order to measure their awareness of storm water pollution issues (Pre-Wave). Then, at the conclusion of the educational components of Project SWEEP, a similar survey was distributed to community residents in the Vollintine-Evergreen Community Association area, in order to measure changes in public awareness that have taken place since Project SWEEP started (Post-Wave). This report compares the results of the two community awareness surveys, and also makes comparisons to three similar citywide surveys commissioned by the City of Memphis Environmental Engineering Department.

Specific questions to be answered by this study include:

- How many respondents are aware of the definition of storm water?
- How many respondents think there is a problem with storm water pollution in Memphis?
- Do respondents believe that storm water goes through a cleaning process before reaching the Mississippi River?
- How interested are respondents in learning more about storm water pollution?
- How do respondents usually dispose of their used automobile oil?
- What other comments did respondents pass along about the subjects of storm water or storm water pollution?

Methodology

- In both the "Pre-Wave" and the "Post-Wave," a total of 200 surveys were administered to community residents by the Vollintine-Evergreen Community Association.
- The "Pre-Wave" was completed in October, 2002. The "Post-Wave" was completed in April, 2003. The terms "Pre-Wave" and "Post-Wave" are used in the report that follows to refer to the two survey periods.
- A copy of the questionnaire is appended.

Summary of Findings/Conclusions

- 1) Education/Learning More. Measuring awareness of storm water issues and prevention methods, and how such knowledge has changed as a result of Project SWEEP, is certainly the primary goal of this Pre/Post survey that was conducted with people living in the Vollintine-Evergreen Community Association area.

Probably the one survey question that best gauged interest in the subjects of storm water and storm water pollution asked respondents how interested they would be in learning more about storm water pollution. A quite sizeable 90% of Post-Wave survey participants -- up from 77% in the Pre-Wave -- said they would be Very Interested or Somewhat Interested in learning more about storm water pollution. Not only was this 90% level of being Very Interested/Somewhat Interested in learning more about storm water pollution an increase from 77% in the Pre-Wave, but in none of the three City of Memphis citywide surveys conducted by the city's Environmental Engineering Department did interest reach this 90% level.

In addition, when given the opportunity to pass along written comments on the subjects of storm water and storm water pollution, both the Pre-Wave and Post-Wave surveys saw several respondents say they would like to know more about these subjects.

Based on these results, it would certainly appear that residents in the Vollintine-Evergreen Community Association would be receptive to continued education about storm water and storm water pollution.

- 2) Storm Water Pollution Problem. In addition to the above-mentioned high level of interest respondents expressed when it comes to learning more about storm water and storm water pollution, another survey result that we wanted to discuss involved whether or not survey participants felt Memphis has a problem with storm water pollution.

The percentage of those surveyed who think Memphis has a problem with storm water pollution did decrease from 84% in the Pre-Wave to 68% in the Post-Wave. However, what is probably more important is that both periods' figures are far above the percentage of respondents in all three of the City of Memphis Environmental Engineering Department surveys who thought there was a problem with storm water pollution problem in Memphis.

With so many of the people participating in this survey being of the opinion that a storm water pollution problem exists in Memphis -- about three times more than in the City of Memphis surveys which measured opinion in the city as a whole -- it would appear that further attention should be paid to the area served by the Vollintine-Evergreen Community Association due to the fact so many residents feel there is a problem with storm water pollution.

- 3) Specifics. We were impressed by the specific instances of storm water pollution that were cited by survey participants in both the Pre-Wave and Post-Wave periods when they were asked to provide written comments on the subjects of storm water and storm water pollution. It seemed that comments about these issues were a bit more in-depth in the Post-Wave, which may indicate some people have gained knowledge about storm water and storm water pollution as a result of Project SWEEP.

Examples of storm water pollution and the means of preventing it that were pointed out by respondents included the following:

- Storm drains not cleaned up
- Dealing with flooding problems near houses
- Debris in yards

- Creeks that have debris
- Sewers need to be checked
- Improperly disposed paints, chemicals, oil, etc.

The causes of storm water pollution noted by respondents such as those mentioned at the bottom of the previous page demonstrate the knowledge that many people have about what causes storm water pollution, as well as their interest in the subject; this knowledge and interest quite likely has come from, at least in part, the Project SWEEP program.

DETAILED FINDINGS

How Many Respondents Said They Were Aware Of The Definition Of Storm Water Provided To Them?

- In the first survey question, respondents were presented with the definition of storm water -- the runoff from rain and melted snow that flows into the city's storm drain system -- and asked whether they were aware of the definition.
- Both the Pre-Wave and Post-Wave periods saw about two-thirds of those surveyed say they are **Aware of the definition of storm water** (65% Pre-Wave, 64% Post-Wave).
- While Awareness of the definition of storm water basically didn't change from the Pre-Wave to the Post-Wave, the level of awareness demonstrated in these two surveys is slightly higher than the average awareness level we saw in the City of Memphis Environmental Engineering Department surveys conducted across Memphis in the past few years.

	<u>Pre-Wave</u> (200)	<u>Post-Wave</u> (200)
<u>Aware Of Definition Of Storm Water?</u>		
Yes, Aware of definition	65%	64%
No, Not aware of definition	35	36

How Many Respondents Think Memphis Has A Problem With Storm Water Pollution?

- After being informed that storm water pollution occurs when items get into the storm water, survey participants were asked if they think Memphis has a problem with storm water pollution.
- Although the percentage of respondents who **Think Memphis has a problem with storm water pollution** declined from 84% in the Pre-Wave to 68% in the Post-Wave, both of these scores are considerably higher than the approximately 25% of those interviewed in the three earlier City of Memphis surveys who said they were Aware of a problem with storm water pollution in Memphis. This difference could reflect the fact that people in the Vollintine-Evergreen Community Association area are above average in being of the opinion there is a problem with storm water pollution in Memphis, perhaps because of their own experiences.

	<u>Pre-Wave</u> (200)	<u>Post-Wave</u> (200)
<u>Think Memphis Has Problem With Storm Water Pollution?</u>		
Yes, Has a problem	84%	68%
Doesn't have a problem/Don't know	16	32

Do Respondents Believe Storm Water Goes Through A Cleaning Process Before Reaching The Mississippi River?

- Even with a slight decrease in the Post-Wave survey, the vast majority of respondents in both surveys -- 88% in the Pre-Wave, 79% in the Post-Wave -- believes that storm water **Does not go through a cleaning process before reaching the Mississippi River.**
- These results are consistent with what was seen in the three City of Memphis surveys, with people much more likely to be of the opinion that storm water does not go through a cleaning process.

	<u>Pre-Wave</u> (200)	<u>Post-Wave</u> (200)
<u>Does Storm Water Go Through A Cleaning Process?</u>		
Yes, Does go through a cleaning process	12%	21%
No, Does not go through a cleaning process/Don't know	88	79

How Interested Are Respondents In Learning More About Storm Water Pollution?

- In what should be a considered a favorable result that in the end may best represent the impact of Project SWEEP on Vollintine-Evergreen Community Association area residents, an impressive 90% of Post-Wave respondents said they are **Very Interested** (48%) or **Somewhat Interested** (42%) in learning more about storm water pollution. This 90% level of interest (Very Interested/Somewhat Interested) is up from what was already a respectable 77% in the Pre-Wave survey.
- Although close to reaching it, none of the three City of Memphis Environmental Engineering surveys registered as high a level of interest in learning more about storm water pollution as the 90% Post-Wave score seen here.

	<u>Pre-Wave</u> (200)	<u>Post-Wave</u> (200)
<u>Interest In Learning More About Storm Water Pollution</u>		
Very Interested	31%	48%
Somewhat Interested	46	42
Not Interested	23	10

How Do Respondents Dispose Of Their Used Automobile Oil?

- In the final survey question, survey participants were asked how they usually dispose of their used automobile oil.
- **Taking to a Recycling center** was the preferred way of disposing of used oil among survey participants in both the Pre-Wave and Post-Wave (69% in Pre-Wave, 79% in Post-Wave). While there was a slight increase in Taking used oil to a Recycling center in the Post-Wave (from 69% to 79%), there was also a lower No answer component in the Post-Wave (6%, vs. 14% in the Pre-Wave).
- For both the two leading ways of disposing used oil listed below -- **Taking to a Recycling center** and **Putting in the trash** -- used oil disposal patterns were quite similar to what we have seen in the three City of Memphis surveys.

<u>How Dispose Of Used Oil</u>	<u>Pre-Wave</u> (200)	<u>Post-Wave</u> (200)
Take to a recycling center	69%	79%
Put in the trash	14	12
Pour in the street	3	3
No answer	14	6

Respondent Comments

- Following the five survey questions, respondents were given the opportunity to pass along written comments about the subjects of storm water or storm water pollution. Comments submitted during the Pre-Wave are listed on the next page, while Post-Wave comments can be found on page 13.

Pre-Wave

- In reading the Pre-Wave comments, it is quickly apparent that people in the Vollintine-Evergreen Community Association area who participated in this survey are indeed interested in learning more about storm water and storm water pollution. This clear interest in learning more about storm water and storm water pollution verifies the strong level of interest expressed in an earlier survey result (see page 9).
- Besides wanting to learn more about storm water and storm water pollution, a few Pre-Wave respondents noted specific areas that need to be cleaned up (such as storm drains).

Post-Wave

- Probably the most interesting aspect of the Post-Wave comments on page 13 is that while respondents continue to express an interest in the subjects of storm water and storm water pollution, a slightly larger portion of the comments in the Post-Wave refer to specific actions that people should take to prevent storm water pollution, as well as demonstrate a greater awareness of what causes storm water pollution. The fact that a noticeable percentage of the Post-Wave comments seemed directed at ways to prevent storm water pollution would appear to illustrate, at least to some degree, knowledge that area residents have gained through Project SWEEP.

(please see lists on the next two pages)

Respondent Comments

- Pre-Wave -

- I have enjoyed learning about storm water and storm water pollution.
- Very interested in storm water pollution. I have always heard Memphis had the best water system around; would like to know if it's being polluted by unclean storm water flowing into it.
- They need to clean up the storm drains.
- I want to know why are the people so interested about storm water. What is its importance?
- The pollution should be cleaned up; it gives people bad health.

- We need to watch what we are doing to our hometown.
- Would like more information.
- Backup flooding in overdeveloped areas.
- We have problems near our house with flooding; it has caused a lot of problems, we need to address this issue.
- I do not know much about it. I would like to know what to do to make my lot more absorbent.

- Widespread ignorance in the community about dumping liquid chemicals on the ground.
- Larger fines.
- I'd like to know what is done with the storm water.
- What about the overflow of the drains backing up into your basement?
- Don't forget acid rain.

- Better control and cleanup of the water before it gets to the big muddy.
- Need to clear the gutter more on the streets to minimize flash flooding.
- Neighbor litter blocks drains and needs more public participation to prevent.
- Educate people about paint.
- People leave debris from yards; never keep away from drains.

- I thought that this term meant "water from storms or rain water"; shows how much I know.
- I've had an urban environment class and got to see all the nasty stuff that gets into storm water and makes its way to the Mississippi River; definitely an issue worth addressing.

Respondent Comments

- Post-Wave -

- I believe that Memphians should become more aware and more careful about ground water, storm water, and surface water runoff. We need to make the connection about what we do with paints, chemicals, oil, gasoline, garden products, and where they go when it rains.
- It is very important to keep the creeks and channels free of debris to avoid flooding.
- People need to sweep in front of their houses in the street to clean trash and leaves.
- Citizens need to be educated on the dangers of storm water and water contamination in general.
- We need to know more about storm water.

- Unsure about cleaning process.
- The sewers need to be checked at least once a month.
- I have never heard of storm water pollution.
- Needs to be checked for leaves and other trash that collects at the drains.
- Depends on area whether storm water goes through a cleaning process before reaching the Mississippi River.

- Does the water contaminate your drinking water that goes into gutters?
- I appreciate concerns regarding waster water.
- The schools/education needs attention first, then city problems.

Appendix

STORM WATER SURVEY

Please circle your answer on the following questions. Thank you for your help.

- 1. Storm water is the runoff from rain and melted snow that flows into the city's storm drain system. Were you aware of this?**

YES

NO

- 2. Storm water pollution occurs when items get into the storm water. Do you think Memphis has a problem with storm water pollution?**

YES

NO

DON'T KNOW

- 3. Do you believe storm water goes through a cleaning process before reaching the Mississippi River?**

YES

NO

DON'T KNOW

- 4. How interested are you in learning more about the issue of storm water pollution?**

**VERY
INTERESTED**

**SOMEWHAT
INTERESTED**

**NOT
INTERESTED**

- 5. If you change the oil in your car yourself, or if someone changes your oil for you, how is the used oil usually disposed?**

**POUR IN
THE STREET**

**TAKE TO A
RECYCLING CENTER**

**PUT IN
THE TRASH**

Please use the space below to pass along any comments about the subject of storm water or storm water pollution.